# HP UPS XR Products Power Cord and Options Reference Guide



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#### **Audience Assumptions**

This guide is intended for individuals requiring information about the cabling and operation of UPSs and related hardware options. Installation and hardwiring procedures should be carried out by a technician with specific experience with high-voltage equipment.

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# **Low-voltage UPS XR models**

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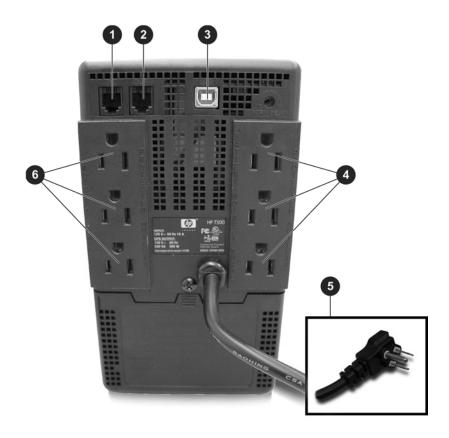
# Low-voltage models summary

**NOTE:** All low-voltage UPS models have a utility voltage frequency of 50/60 Hz.

UPS model	UPS configuration	Rating (VA)	Nominal power rating (W)	Option kit part number
T500 (on page <u>7</u> )	Tower	500	300	361475-001
T700 NA (on page <u>9</u> )	Tower	700	500	204015-001
T700 JPN (on page <u>11</u> )	Tower	700	500	204015-291
T1000 XR NA ("T1000 XR NA, T1000 XR JPN, T1500 XR NA, and T1500 XR JPN" on page <u>13</u> )	Tower	1000	700	204155-001

UPS model	UPS configuration	Rating (VA)	Nominal power rating (W)	Option kit part number
T1000 XR JPN ("T1000 XR NA, T1000 XR JPN, T1500 XR NA, and T1500 XR JPN" on page <u>13</u> )	Tower	1000	700	312803-291
T1500 XR NA ("T1000 XR NA, T1000 XR JPN, T1500 XR NA, and T1500 XR JPN" on page <u>13</u> )	Tower	1440	1050	204155-002
T1500 XR JPN ("T1000 XR NA, T1000 XR JPN, T1500 XR NA, and T1500 XR JPN" on page <u>13</u> )	Tower	1500	1050	204155-291
T2200 XR NA (on page <u>15</u> )	Tower	1920	1600	204451-001
T2200 XR JPN (on page <u>17</u> )	Tower	2200	1600	204451-291
R1500 XR NA ("R1500 XR NA and R1500 XR JPN" on page <u>19</u> )	Rack	1440	1340	204404-001
R1500 XR JPN ("R1500 XR NA and R1500 XR JPN" on page <u>19</u> )	Rack	1500	1340	204404-291
R3000 XR NA ("R3000 XR NA and R3000j XR JPN" on page 20)	Rack	2880	2700	192186-001
R3000j XR JPN ("R3000 XR NA and R3000j XR JPN" on page <u>20</u> )	Rack	2400	2250	192186-291

# T500



Item	Description
1	Network Transient Protector IN jack
2	Network Transient Protector OUT jack
3	USB port
4	Three NEMA 5-15 receptacles for UPS battery backup
5	Nondetachable input power cord with NEMA 5-15 plug
6	Three NEMA 5-15 receptacles for surge-only protection

The UPS requires a dedicated (unshared) 10-A branch circuit.

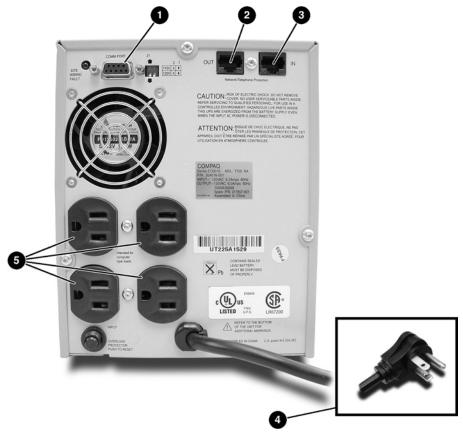
**Load Equipment Power**—To provide power to the load equipment, plug the compatible load equipment power cords into the battery backup receptacles on the UPS rear.

**Surge-Only Protection**—To provide surge-only protection, plug heavy-draw devices into the surge receptacles on the UPS rear.

**Circuitry Protection**—To protect communication devices from surges, plug the network cable into the Network Transient Protector IN jack. Connect a network jumper cable between the Network Transient Protector OUT jack and the network input jack.

**Power Management**—To manage the UPS with power management software, connect the host computer to the USB port on the UPS rear.

# **T700 NA**



Item	Description
1	Communications port
2	Network Transient Protector OUT jack
3	Network Transient Protector IN jack
4	Nondetachable input power cord with NEMA 5-15 plug
5	Four NEMA 5-15 receptacles

The UPS requires a dedicated (unshared) 10-A branch circuit.

**Load Equipment Power**—To provide power to the load equipment, plug the compatible load equipment power cords into the receptacles on the UPS rear.

**Circuitry Protection**—To protect communication devices from surges, plug the network cable into the Network Transient Protector IN jack. Connect a network jumper cable between the Network Transient Protector OUT jack and the network input jack.

**Power Management**—To manage the UPS with power management software, connect the interface cable between the UPS communications port and the host computer serial port.

For power management, a 1.8-m (6-ft) UPS/computer interface cable is included (cable assembly number 201092-001). The interface cable is not needed for normal operation, but is essential for advanced power management.

# T700 JPN



Item	Description
1	Communications port
2	Network Transient Protector OUT jack
3	Network Transient Protector IN jack
4	Nondetachable input power cord with NEMA 5-15 plug
5	Four NEMA 5-15 receptacles

The UPS requires a dedicated (unshared) 10-A branch circuit.

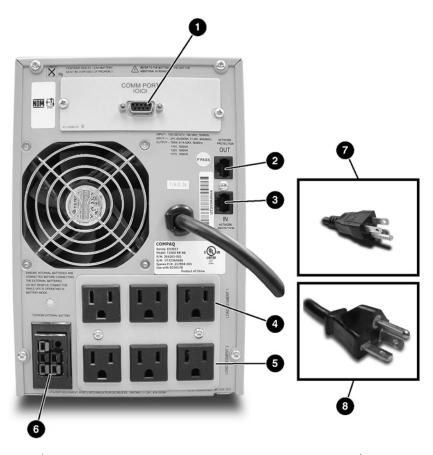
**Load Equipment Power**—To provide power to the load equipment, plug the compatible load equipment power cords into the receptacles on the UPS rear.

**Circuitry Protection**—To protect communication devices from surges, plug the network cable into the Network Transient Protector IN jack. Connect a network jumper cable between the Network Transient Protector OUT jack and the network input jack.

**Power Management**—To manage the UPS with power management software, connect the interface cable between the UPS communications port and the host computer serial port.

For power management, a 1.8-m (6-ft) UPS/computer interface cable is included (cable assembly number 201092-001). The interface cable is not needed for normal operation, but is essential for advanced power management.

# T1000 XR NA, T1000 XR JPN, T1500 XR NA, and T1500 XR JPN



Item	Description
1	Communications port/option slot
2	Network Transient Protector OUT jack
3	Network Transient Protector IN jack
4	Load segment 1 (three NEMA 5-15 receptacles)
5	Load segment 2 (three NEMA 5-15 receptacles)
6	ERM connector

Item	Description
7	Nondetachable input power cord with NEMA 5-15 plug (T1000 XR NA and T1500 XR NA)
8	Nondetachable input power cord with NEMA 5-20 plug (T1000 XR JPN and T1500 XR JPN)

The UPS requires a dedicated (unshared) 15-A branch circuit (NA models) or a dedicated (unshared) 20-A branch circuit (JPN models).

**Load Equipment Power**—To provide power to the load equipment, plug the compatible load equipment power cords into the receptacles on the UPS rear.

The receptacles are arranged in load segments, which can be controlled separately by power management software.

**Circuitry Protection**—To protect communication devices from surges, plug the network cable into the Network Transient Protector IN jack. Connect a network jumper cable between the Network Transient Protector OUT jack and the network input jack.

**Power Management**—To manage the UPS with power management software, connect the interface cable between the UPS communications port and the host computer serial port.

For power management, a 1.8-m (6-ft) UPS/computer interface cable is included (cable assembly number 201092-001). The interface cable is not needed for normal operation, but is essential for advanced power management.

**Extended Runtime**—To extend the UPS runtime, connect an ERM to the ERM connector. For more information about HP ERMs, refer to Hardware Options (on page <u>49</u>).

**NOTE:** To properly configure UPS XR models, except the R5500 XR and R12000 XR, when attaching an ERM, download and run the configuration file SP16385.EXE located at the HP website (http://www.hp.com/products/ups).

# **T2200 XR NA**



Item	Description
1	Communications port/option slot
2	Network Transient Protector IN jack
3	Network Transient Protector OUT jack
4	Load segment 2 (three NEMA 5-15 receptacles)
5	Load segment 1 (three NEMA 5-15 receptacles)
6	Load segment 3 (two NEMA 5-20 receptacles)
7	Nondetachable input power cord with NEMA 5-20 plug

Item	Description
8	ERM connector

The UPS requires a dedicated (unshared) 20-A branch circuit.

**Load Equipment Power**—To provide power to the load equipment, plug the compatible load equipment power cords into the receptacles on the UPS rear.

The receptacles are arranged in load segments, which can be controlled separately by power management software.

**Circuitry Protection**—To protect communication devices from surges, plug the network cable into the Network Transient Protector IN jack. Connect a network jumper cable between the Network Transient Protector OUT jack and the network input jack.

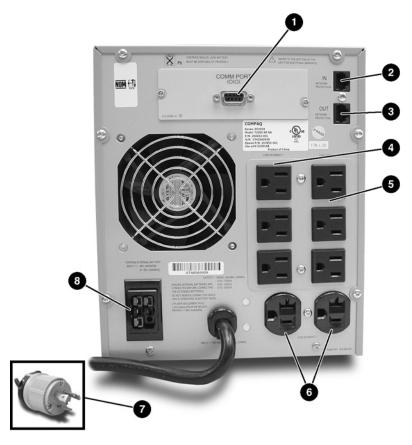
**Power Management**—To manage the UPS with power management software, connect the interface cable between the UPS communications port and the host computer serial port.

For power management, a 1.8-m (6-ft) UPS/computer interface cable is included (cable assembly number 201092-001). The interface cable is not needed for normal operation, but is essential for advanced power management.

**Extended Runtime**—To extend the UPS runtime, connect an ERM to the ERM connector. For more information about HP ERMs, refer to Hardware Options (on page <u>49</u>).

**NOTE:** To properly configure UPS XR models, except the R5500 XR and R12000 XR, when attaching an ERM, download and run the configuration file SP16385.EXE located at the HP website (http://www.hp.com/products/ups).

# **T2200 XR JPN**



Item	Description	
1	Communications port/option slot	
2	Network Transient Protector IN jack	
3	Network Transient Protector OUT jack	
4	Load segment 2 (three NEMA 5-15 receptacles)	
5	Load segment 1 (three NEMA 5-15 receptacles)	
6	Load segment 3 (two NEMA 5-20 receptacles)	
7	Nondetachable input power cord with NEMA L5-30 plug	

Item	Description
8	ERM connector

The UPS requires a dedicated (unshared) 30-A branch circuit.

**Load Equipment Power**—To provide power to the load equipment, plug the compatible load equipment power cords into the receptacles on the UPS rear.

The receptacles are arranged in load segments, which can be controlled separately by power management software.

**Circuitry Protection**—To protect communication devices from surges, plug the network cable into the Network Transient Protector IN jack. Connect a network jumper cable between the Network Transient Protector OUT jack and the network input jack.

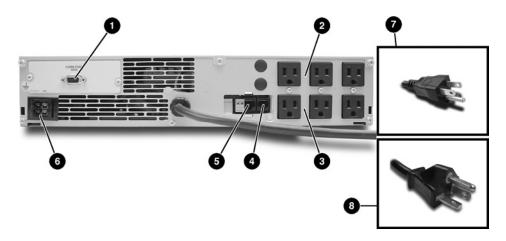
**Power Management**—To manage the UPS with power management software, connect the interface cable between the UPS communications port and the host computer serial port.

For power management, a 1.8-m (6-ft) UPS/computer interface cable is included (cable assembly number 201092-001). The interface cable is not needed for normal operation, but is essential for advanced power management.

**Extended Runtime**—To extend the UPS runtime, connect an ERM to the ERM connector. For more information about HP ERMs, refer to Hardware Options (on page <u>49</u>).

**NOTE:** To properly configure UPS XR models, except the R5500 XR and R12000 XR, when attaching an ERM, download and run the configuration file SP16385.EXE located at the HP website (http://www.hp.com/products/ups).

#### R1500 XR NA and R1500 XR JPN



Item	Description
1	Communications port/option slot
2	Load segment 2 (three NEMA 5-15 receptacles)
3	Load segment 1 (three NEMA 5-15 receptacles)
4	Network Transient Protector OUT jack
5	Network Transient Protector IN jack
6	ERM connector
7	Nondetachable input power cord with NEMA 5-15 plug (R1500 XR NA)
8	Nondetachable input power cord with NEMA 5-20 plug (R1500 XR JPN)

**UPS Power**—To provide power to the UPS, plug the input power cord into a compatible, grounded utility power outlet.

The UPS requires a dedicated (unshared) 15-A branch circuit (NA models) or a dedicated (unshared) 20-A branch circuit (JPN models).

**Load Equipment Power**—To provide power to the load equipment, plug the compatible load equipment power cords into the receptacles on the UPS rear.

The receptacles are arranged in load segments, which can be controlled separately by power management software.

**Circuitry Protection**—To protect communication devices from surges, plug the network cable into the Network Transient Protector IN jack. Connect a network jumper cable between the Network Transient Protector OUT jack and the network input jack.

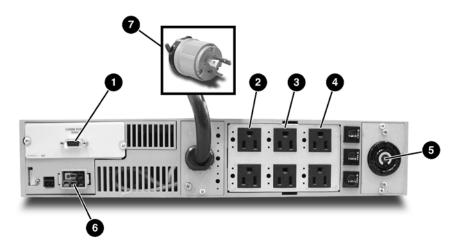
**Power Management**—To manage the UPS with power management software, connect the interface cable between the UPS communications port and the host computer serial port.

For power management, a 3.6-m (12-ft) UPS/computer interface cable is included (cable assembly number 201092-002). The interface cable is not needed for normal operation, but is essential for advanced power management.

**Extended Runtime**—To extend the UPS runtime, connect an ERM to the ERM connector. For more information about HP ERMs, refer to Hardware Options (on page <u>49</u>).

**NOTE:** To properly configure UPS XR models, except the R5500 XR and R12000 XR, when attaching an ERM, download and run the configuration file SP16385.EXE located at the HP website (http://www.hp.com/products/ups).

#### R3000 XR NA and R3000j XR JPN



Item	Description	
1	Communications port/option slot	
2	Load segment 1 (two NEMA 5-15 receptacles)	
3	Load segment 2 (two NEMA 5-15 receptacles)	
4	Load segment 3 (two NEMA 5-15 receptacles)	
5	PDU output (NEMA L5-30) receptacle (load segment 1)	
6	ERM connector	
7	Nondetachable input power cord with NEMA L5-30 plug	

The UPS requires a dedicated (unshared) 30-A branch circuit.

**Load Equipment Power**—To provide power to the load equipment, plug the compatible load equipment power cords into the receptacles on the UPS rear.

The receptacles are arranged in load segments, which can be controlled separately by power management software.

**Power Distribution**—To provide additional load equipment receptacles, connect a compatible PDU to the PDU output receptacle.

**Power Management**—To manage the UPS with power management software, connect the interface cable between the UPS communications port and the host computer serial port.

For power management, a 3.6-m (12-ft) UPS/computer interface cable is included (cable assembly number 201092-002). The interface cable is not needed for normal operation, but is essential for advanced power management.

**Extended Runtime**—To extend the UPS runtime, connect an ERM to the ERM connector. For more information about HP ERMs, refer to Hardware Options (on page <u>49</u>).

**NOTE:** To properly configure UPS XR models, except the R5500 XR and R12000 XR, when attaching an ERM, download and run the configuration file SP16385.EXE located at the HP website (<a href="http://www.hp.com/products/ups">http://www.hp.com/products/ups</a>).

# **High-voltage UPS XR models**

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R12000 XR WW	

# **High-voltage models summary**

**NOTE:** All high-voltage UPS models have a battery string voltage of 240 V and a utility voltage frequency of 50/60 Hz.

UPS model	UPS configuration	Rating (VA)	Nominal power rating (W)	Option kit part number
T700 H INT'L (on page <u>25</u> )	Tower	700	500	204015-B31
T1000 XR H INT'L ("T1000 XR H INT'L and T1500 XR H INT'L" on page <u>27</u> )	Tower	1000	700	204155-B31
T1500 XR H INT'L ("T1000 XR H INT'L and T1500 XR H INT'L" on page <u>27</u> )	Tower	1500	1050	204155-B32

UPS model	UPS configuration	Rating (VA)	Nominal power rating (W)	Option kit part number
T2200 XR H NA (on page <u>29</u> )	Tower	2200	1600	204451-002
T2200 XR H INT'L (on page <u>32</u> )	Tower	2200	1600	204451-B31
R1500 XR H INT'L (on page <u>34</u> )	Rack	1500	1340	204404-B31
R3000h XR NA ("R3000h XR NA and R3000h XR JPN" on page <u>36</u> )	Rack	3000	2700	192186-002
R3000h XR JPN ("R3000h XR NA and R3000h XR JPN" on page 36)	Rack	3000	2700	192186-292
R3000e XR INT (on page <u>37</u> )	Rack	3000	2700	192186-B31
R3000i XR EURO (on page <u>41</u> )	Rack	3000	2700	192186-B32
R3000i XR SCHUKO (on page 39)	Rack	3000	2700	192186-B33
R3000i XR SA (on page <u>43</u> )	Rack	3000	2700	192186-AR1
R5500 XR NA/JPN ("R5500 XR NA/JPN and R5500 XR INTL" on page 45)	Rack	5000	4500	326529-D71
R5500 XR INTL ("R5500 XR NA/JPN and R5500 XR INTL" on page 45)	Rack	50001	45001	326529-B31
		6000 <sup>2</sup>	5400 <sup>2</sup>	326529-B31
R12000 XR WW (on page <u>47</u> )	Rack	12000	12000	207552-B22

- $^{\rm 1}$  NOTE: The rating for the HP UPS R5500 XR INTL model is 5000 VA/4500 W when the nominal utility voltage is set to 200/208 VAC.
- $^{\mathbf{2}}$  NOTE: The rating for the HP UPS R5500 XR INTL model is 6000 VA/5400 W when the nominal utility voltage is set to 220, 230, or 240 VAC.

### **T700 H INT'L**



Item	Description	
1	Communications port	
2	Network Transient Protector OUT jack	
3	Network Transient Protector IN jack	
4	Four IEC-320 receptacles	

Item	Description
5	Input power receptacle (IEC-320) for country-specific plug attachment

**UPS Power**—To provide power to the UPS, connect the input power cord between the UPS input power receptacle and a compatible, grounded utility power outlet.

Use the input power cord from an intended load device to connect the UPS to utility power.

The UPS requires a dedicated (unshared) 10-A branch circuit.

**Load Equipment Power**—To provide power to the load equipment, connect the IEC-to-IEC jumper cords between the inlet power couplers on the load equipment and any of the receptacles on the UPS rear. The jumper cords must have compatible plugs to allow connection to the UPS receptacles.

The following 10-A IEC-to-IEC jumper cords are provided for load equipment power:

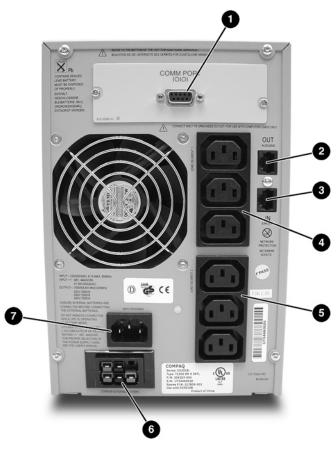
• Two 2-m (6.6-ft) jumper cords (cable assembly number 142263-001)

**Circuitry Protection**—To protect communication devices from surges, plug the network cable into the Network Transient Protector IN jack. Connect a network jumper cable between the Network Transient Protector OUT jack and the network input jack.

**Power Management**—To manage the UPS with power management software, connect the interface cable between the UPS communications port and the host computer serial port.

For power management, a 1.8-m (6-ft) UPS/computer interface cable is included (cable assembly number 201092-001). The interface cable is not needed for normal operation, but is essential for advanced power management.

# T1000 XR H INT'L and T1500 XR H INT'L



Item	Description	
1	Communications port/option slot	
2	Network Transient Protector OUT jack	
3	Network Transient Protector IN jack	
4	Load segment 1 (three IEC-320-C13 receptacles)	
5	Load segment 2 (three IEC-320-C13 receptacles)	
6	ERM connector	

Item	Description
7	Input power receptacle (IEC-320-C14) for country-specific plug attachment

**UPS Power**—To provide power to the UPS, connect the input power cord between the UPS input power receptacle and a compatible, grounded utility power outlet.

Use the input power cord from an intended load device to connect the UPS to utility power.

The UPS requires a dedicated (unshared) 10-A branch circuit.

**Load Equipment Power**—To provide power to the load equipment, connect the IEC-to-IEC jumper cords between the inlet power couplers on the load equipment and any of the receptacles on the UPS rear. The jumper cords must have compatible plugs to allow connection to the UPS receptacles.

The receptacles are arranged in load segments, which can be controlled separately by power management software.

The following 10-A IEC-to-IEC jumper cords are provided for load equipment power:

• Four 2-m (6.6-ft) jumper cords (cable assembly number 142263-001)

**Circuitry Protection**—To protect communication devices from surges, plug the network cable into the Network Transient Protector IN jack. Connect a network jumper cable between the Network Transient Protector OUT jack and the network input jack.

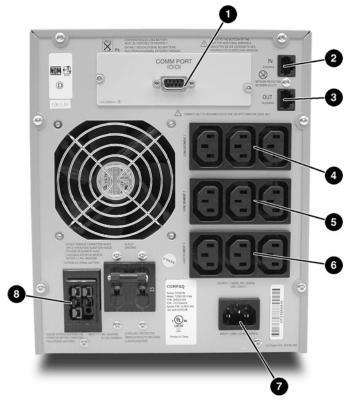
**Power Management**—To manage the UPS with power management software, connect the interface cable between the UPS communications port and the host computer serial port.

For power management, a 1.8-m (6-ft) UPS/computer interface cable is included (cable assembly number 201092-001). The interface cable is not needed for normal operation, but is essential for advanced power management.

**Extended Runtime**—To extend the UPS runtime, connect an ERM to the ERM connector. For more information about HP ERMs, refer to Hardware Options (on page <u>49</u>).

**NOTE:** To properly configure UPS XR models, except the R5500 XR and R12000 XR, when attaching an ERM, download and run the configuration file SP16385.EXE located at the HP website (http://www.hp.com/products/ups).

#### **T2200 XR H NA**



Item	Description	
1	Communications port/option slot	
2	Network Transient Protector IN jack	

Item	Description
3	Network Transient Protector OUT jack
4	Load segment 3 (three IEC-320-C13 receptacles)
5	Load segment 2 (three IEC-320-C13 receptacles)
6	Load segment 1 (three IEC-320-C13 receptacles)
7	Input power receptacle (IEC-320-C14) for country-specific plug attachment
8	ERM connector

**UPS Power**—To provide power to the UPS, connect the input power cord between the UPS input power receptacle and a compatible, grounded utility power outlet.

Use the input power cord from an intended load device to connect the UPS to utility power.

The UPS requires a dedicated (unshared) 10-A branch circuit.

**Load Equipment Power**—To provide power to the load equipment, connect the IEC-to-IEC jumper cords between the inlet power couplers on the load equipment and any of the receptacles on the UPS rear. The jumper cords must have compatible plugs to allow connection to the UPS receptacles.

The receptacles are arranged in load segments, which can be controlled separately by power management software.

The following 10-A IEC-to-IEC jumper cords are provided for load equipment power:

- Four 2-m (6.6-ft) jumper cords (cable assembly number 142263-001)
- Two 2.5-m (8-ft) jumper cords (cable assembly number 142263-002)

**Circuitry Protection**—To protect communication devices from surges, plug the network cable into the Network Transient Protector IN jack. Connect a network jumper cable between the Network Transient Protector OUT jack and the network input jack.

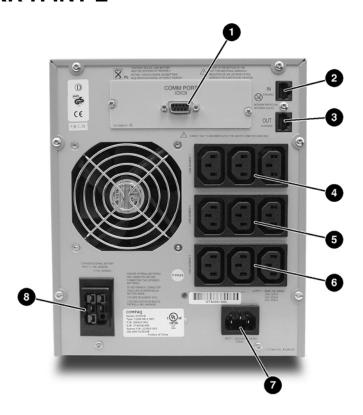
**Power Management**—To manage the UPS with power management software, connect the interface cable between the UPS communications port and the host computer serial port.

For power management, a 1.8-m (6-ft) UPS/computer interface cable is included (cable assembly number 201092-001). The interface cable is not needed for normal operation, but is essential for advanced power management.

**Extended Runtime**—To extend the UPS runtime, connect an ERM to the ERM connector. For more information about HP ERMs, refer to Hardware Options (on page <u>49</u>).

**NOTE:** To properly configure UPS XR models, except the R5500 XR and R12000 XR, when attaching an ERM, download and run the configuration file SP16385.EXE located at the HP website (http://www.hp.com/products/ups).

## **T2200 XR H INT'L**



Item	Description
1	Communications port/option slot
2	Network Transient Protector IN jack
3	Network Transient Protector OUT jack
4	Load segment 3 (three IEC-320-C13 receptacles)
5	Load segment 2 (three IEC-320-C13 receptacles)
6	Load segment 1 (three IEC-320-C13 receptacles)
7	Input power receptacle (IEC-320-C14) for country-specific plug attachment
8	ERM connector

**UPS Power**—To provide power to the UPS, connect the input power cord between the UPS input power receptacle and a compatible, grounded utility power outlet.

Use the input power cord from an intended load device to connect the UPS to utility power.

The UPS requires a dedicated (unshared) 10-A branch circuit.

**Load Equipment Power**—To provide power to the load equipment, connect the IEC-to-IEC jumper cords between the inlet power couplers on the load equipment and any of the receptacles on the UPS rear. The jumper cords must have compatible plugs to allow connection to the UPS receptacles.

The receptacles are arranged in load segments, which can be controlled separately by power management software.

The following 10-A IEC-to-IEC jumper cords are provided for load equipment power:

- Four 2-m (6.6-ft) jumper cords (cable assembly number 142263-001)
- Two 2.5-m (8-ft) jumper cords (cable assembly number 142263-002)

**Circuitry Protection**—To protect communication devices from surges, plug the network cable into the Network Transient Protector IN jack. Connect a network jumper cable between the Network Transient Protector OUT jack and the network input jack.

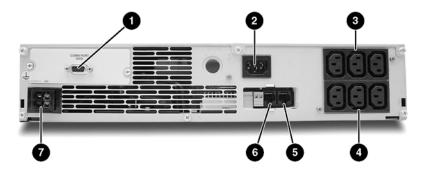
**Power Management**—To manage the UPS with power management software, connect the interface cable between the UPS communications port and the host computer serial port.

For power management, a 1.8-m (6-ft) UPS/computer interface cable is included (cable assembly number 201092-001). The interface cable is not needed for normal operation, but is essential for advanced power management.

**Extended Runtime**—To extend the UPS runtime, connect an ERM to the ERM connector. For more information about HP ERMs, refer to Hardware Options (on page <u>49</u>).

**NOTE:** To properly configure UPS XR models, except the R5500 XR and R12000 XR, when attaching an ERM, download and run the configuration file SP16385.EXE located at the HP website (http://www.hp.com/products/ups).

#### R1500 XR H INT'L



Item	Description
1	Communications port/option slot
2	Input power receptacle (IEC-320-C14) for country-specific plug attachment
3	Load segment 1 (three IEC-320-C13 receptacles)
4	Load segment 2 (three IEC-320-C13 receptacles)
5	Network Transient Protector OUT jack
6	Network Transient Protector IN jack
7	ERM connector

**UPS Power**—To provide power to the UPS, connect the input power cord between the UPS input power receptacle and a compatible, grounded utility power outlet.

Use the input power cord from an intended load device to connect the UPS to utility power.

The UPS requires a dedicated (unshared) 10-A branch circuit.

**Load Equipment Power**—To provide power to the load equipment, connect the IEC-to-IEC jumper cords between the inlet power couplers on the load equipment and any of the receptacles on the UPS rear. The jumper cords must have compatible plugs to allow connection to the UPS receptacles.

The receptacles are arranged in load segments, which can be controlled separately by power management software.

The following 10-A IEC-to-IEC jumper cords are provided for load equipment power:

- Two 2.5-m (8-ft) jumper cords (cable assembly number 142263-002)
- Two 3-m (10-ft) jumper cords (cable assembly number 142263-003)

**Circuitry Protection**—To protect communication devices from surges, plug the network cable into the Network Transient Protector IN jack. Connect a network jumper cable between the Network Transient Protector OUT jack and the network input jack.

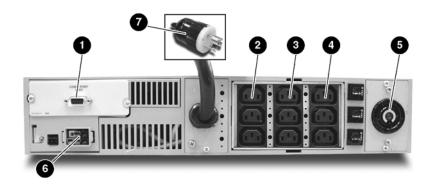
**Power Management**—To manage the UPS with power management software, connect the interface cable between the UPS communications port and the host computer serial port.

For power management, a 3.6-m (12-ft) UPS/computer interface cable is included (cable assembly number 201092-002). The interface cable is not needed for normal operation, but is essential for advanced power management.

**Extended Runtime**—To extend the UPS runtime, connect an ERM to the ERM connector. For more information about HP ERMs, refer to Hardware Options (on page <u>49</u>).

**NOTE:** To properly configure UPS XR models, except the R5500 XR and R12000 XR, when attaching an ERM, download and run the configuration file SP16385.EXE located at the HP website (http://www.hp.com/products/ups).

#### R3000h XR NA and R3000h XR JPN



Item	Description
1	Communications port/option slot
2	Load segment 1 (three IEC-320-C13 receptacles)
3	Load segment 2 (three IEC-320-C13 receptacles)
4	Load segment 3 (three IEC-320-C13 receptacles)
5	PDU output (NEMA L6-20) receptacle (load segment 1)
6	ERM connector
7	Nondetachable input power cord with NEMA L6-20 plug

**UPS Power**—To provide power to the UPS, plug the input power cord into a compatible, grounded utility power outlet.

The UPS requires a dedicated (unshared) 20-A branch circuit.

**Load Equipment Power**—To provide power to the load equipment, connect the IEC-to-IEC jumper cords between the inlet power couplers on the load equipment and any of the receptacles on the UPS rear. The jumper cords must have compatible plugs to allow connection to the UPS receptacles.

The receptacles are arranged in load segments, which can be controlled separately by power management software.

The following 10-A IEC-to-IEC jumper cords are provided for load equipment power:

- Two 2-m (6.6-ft) jumper cords (cable assembly number 142263-001)
- Two 2.5-m (8-ft) jumper cords (cable assembly number 142263-002)
- Two 3-m (10-ft) jumper cords (cable assembly number 142263-003)

**Power Distribution**—To provide additional load equipment receptacles, connect a compatible PDU to the PDU output receptacle.

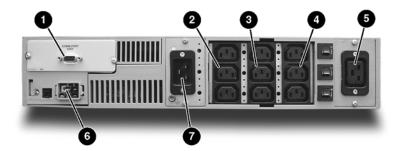
**Power Management**—To manage the UPS with power management software, connect the interface cable between the UPS communications port and the host computer serial port.

For power management, a 3.6-m (12-ft) UPS/computer interface cable is included (cable assembly number 201092-002). The interface cable is not needed for normal operation, but is essential for advanced power management.

**Extended Runtime**—To extend the UPS runtime, connect an ERM to the ERM connector. For more information about HP ERMs, refer to Hardware Options (on page <u>49</u>).

**NOTE:** To properly configure UPS XR models, except the R5500 XR and R12000 XR, when attaching an ERM, download and run the configuration file SP16385.EXE located at the HP website (http://www.hp.com/products/ups).

## R3000e XR INT



Item	Description	
1	Communications port/option slot	
2	Load segment 1 (three IEC-320-C13 receptacles)	
3	Load segment 2 (three IEC-320-C13 receptacles)	
4	Load segment 3 (three IEC-320-C13 receptacles)	
5	PDU output (IEC-320-C20) receptacle (load segment 1)	
6	ERM connector	
7	Input power receptacle (IEC-320-C19) for country-specific plug attachment	

**UPS Power**—To provide power to the UPS, connect the input power cord between the UPS input power receptacle and a compatible, grounded utility power outlet.

A country-specific input power cord is included.

The UPS requires a dedicated (unshared) 16-A branch circuit.

**Load Equipment Power**—To provide power to the load equipment, connect the IEC-to-IEC jumper cords between the inlet power couplers on the load equipment and any of the receptacles on the UPS rear. The jumper cords must have compatible plugs to allow connection to the UPS receptacles.

The receptacles are arranged in load segments, which can be controlled separately by power management software.

The following 10-A IEC-to-IEC jumper cords are provided for load equipment power:

- Two 2-m (6.6-ft) jumper cords (cable assembly number 142263-001)
- Two 2.5-m (8-ft) jumper cords (cable assembly number 142263-002)
- Two 3-m (10-ft) jumper cords (cable assembly number 142263-003)

**Power Distribution**—To provide additional load equipment receptacles, connect a compatible PDU to the PDU output receptacle.

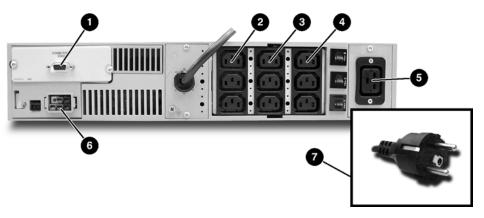
**Power Management**—To manage the UPS with power management software, connect the interface cable between the UPS communications port and the host computer serial port.

For power management, a 3.6-m (12-ft) UPS/computer interface cable is included (cable assembly number 201092-002). The interface cable is not needed for normal operation, but is essential for advanced power management.

**Extended Runtime**—To extend the UPS runtime, connect an ERM to the ERM connector. For more information about HP ERMs, refer to Hardware Options (on page <u>49</u>).

**NOTE:** To properly configure UPS XR models, except the R5500 XR and R12000 XR, when attaching an ERM, download and run the configuration file SP16385.EXE located at the HP website (http://www.hp.com/products/ups).

## R3000i XR SCHUKO



Item	Description
1	Communications port/option slot
2	Load segment 1 (three IEC-320-C13 receptacles)
3	Load segment 2 (three IEC-320-C13 receptacles)
4	Load segment 3 (three IEC-320-C13 receptacles)
5	PDU output (IEC-320-C20) receptacle (load segment 1)

Item	Description
6	ERM connector
7	Nondetachable input power cord with CEE 7/7 SCHUKO plug

**UPS Power**—To provide power to the UPS, plug the input power cord into a compatible, grounded utility power outlet.

The UPS requires a dedicated (unshared) 16-A branch circuit.

**Load Equipment Power**—To provide power to the load equipment, connect the IEC-to-IEC jumper cords between the inlet power couplers on the load equipment and any of the receptacles on the UPS rear. The jumper cords must have compatible plugs to allow connection to the UPS receptacles.

The receptacles are arranged in load segments, which can be controlled separately by power management software.

The following 10-A IEC-to-IEC jumper cords are provided for load equipment power:

- Two 2-m (6.6-ft) jumper cords (cable assembly number 142263-001)
- Two 2.5-m (8-ft) jumper cords (cable assembly number 142263-002)
- Two 3-m (10-ft) jumper cords (cable assembly number 142263-003)

**Power Distribution**—To provide additional load equipment receptacles, connect a compatible PDU to the PDU output receptacle.

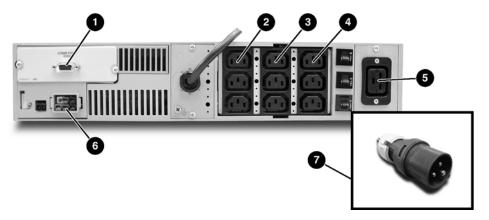
**Power Management**—To manage the UPS with power management software, connect the interface cable between the UPS communications port and the host computer serial port.

For power management, a 3.6-m (12-ft) UPS/computer interface cable is included (cable assembly number 201092-002). The interface cable is not needed for normal operation, but is essential for advanced power management.

**Extended Runtime**—To extend the UPS runtime, connect an ERM to the ERM connector. For more information about HP ERMs, refer to Hardware Options (on page <u>49</u>).

**NOTE:** To properly configure UPS XR models, except the R5500 XR and R12000 XR, when attaching an ERM, download and run the configuration file SP16385.EXE located at the HP website (http://www.hp.com/products/ups).

## R3000i XR EURO



Item	Description	
1	Communications port/option slot	
2	Load segment 1 (three IEC-320-C13 receptacles)	
3	Load segment 2 (three IEC-320-C13 receptacles)	
4	Load segment 3 (three IEC-320-C13 receptacles)	
5	PDU output (IEC-320-C20) receptacle (load segment 1)	
6	ERM connector	
7	Nondetachable input power cord with 16-A IEC-309 plug	

**UPS Power**—To provide power to the UPS, plug the input power cord into a compatible, grounded utility power outlet.

The UPS requires a dedicated (unshared) 16-A branch circuit.

**Load Equipment Power**—To provide power to the load equipment, connect the IEC-to-IEC jumper cords between the inlet power couplers on the load equipment and any of the receptacles on the UPS rear. The jumper cords must have compatible plugs to allow connection to the UPS receptacles.

The receptacles are arranged in load segments, which can be controlled separately by power management software.

The following 10-A IEC-to-IEC jumper cords are provided for load equipment power:

- Two 2-m (6.6-ft) jumper cords (cable assembly number 142263-001)
- Two 2.5-m (8-ft) jumper cords (cable assembly number 142263-002)
- Two 3-m (10-ft) jumper cords (cable assembly number 142263-003)

**Power Distribution**—To provide additional load equipment receptacles, connect a compatible PDU to the PDU output receptacle.

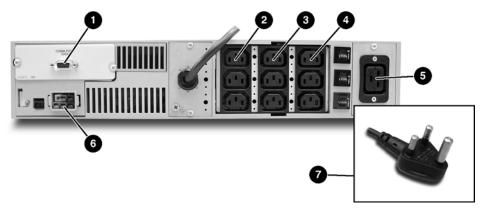
**Power Management**—To manage the UPS with power management software, connect the interface cable between the UPS communications port and the host computer serial port.

For power management, a 3.6-m (12-ft) UPS/computer interface cable is included (cable assembly number 201092-002). The interface cable is not needed for normal operation, but is essential for advanced power management.

**Extended Runtime**—To extend the UPS runtime, connect an ERM to the ERM connector. For more information about HP ERMs, refer to Hardware Options (on page <u>49</u>).

**NOTE:** To properly configure UPS XR models, except the R5500 XR and R12000 XR, when attaching an ERM, download and run the configuration file SP16385.EXE located at the HP website (<a href="http://www.hp.com/products/ups">http://www.hp.com/products/ups</a>).

## **R3000i XR SA**



Item	Description
1	Communications port/option slot
2	Load segment 1 (three IEC-320-C13 receptacles)
3	Load segment 2 (three IEC-320-C13 receptacles)
4	Load segment 3 (three IEC-320-C13 receptacles)
5	PDU output (IEC-320-C20) receptacle (load segment 1)
6	ERM connector
7	Nondetachable input power cord with BS-546 plug

**UPS Power**—To provide power to the UPS, plug the input power cord into a compatible, grounded utility power outlet.

The UPS requires a dedicated (unshared) 16-A branch circuit.

**Load Equipment Power**—To provide power to the load equipment, connect the IEC-to-IEC jumper cords between the inlet power couplers on the load equipment and any of the receptacles on the UPS rear. The jumper cords must have compatible plugs to allow connection to the UPS receptacles.

The receptacles are arranged in load segments, which can be controlled separately by power management software.

The following 10-A IEC-to-IEC jumper cords are provided for load equipment power:

- Two 2-m (6.6-ft) jumper cords (cable assembly number 142263-001)
- Two 2.5-m (8-ft) jumper cords (cable assembly number 142263-002)
- Two 3-m (10-ft) jumper cords (cable assembly number 142263-003)

**Power Distribution**—To provide additional load equipment receptacles, connect a compatible PDU to the PDU output receptacle.

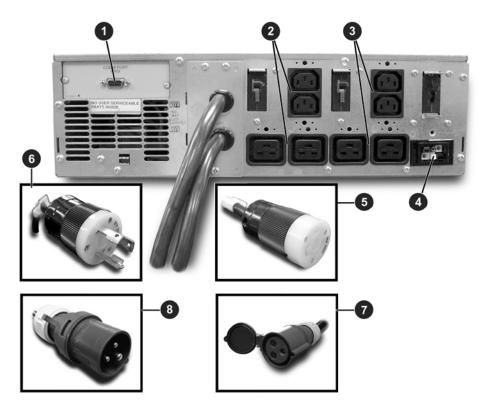
**Power Management**—To manage the UPS with power management software, connect the interface cable between the UPS communications port and the host computer serial port.

For power management, a 3.6-m (12-ft) UPS/computer interface cable is included (cable assembly number 201092-002). The interface cable is not needed for normal operation, but is essential for advanced power management.

**Extended Runtime**—To extend the UPS runtime, connect an ERM to the ERM connector. For more information about HP ERMs, refer to Hardware Options (on page <u>49</u>).

**NOTE:** To properly configure UPS XR models, except the R5500 XR and R12000 XR, when attaching an ERM, download and run the configuration file SP16385.EXE located at the HP website (<a href="http://www.hp.com/products/ups">http://www.hp.com/products/ups</a>).

# R5500 XR NA/JPN and R5500 XR INTL



Item	Description	
1	Communications port/option slot	
2	Load segment 1 (two IEC-320-C19 receptacles and two IEC-320-C13 receptacles)	
3	Load segment 2 (two IEC-320-C19 receptacles and two IEC-320-C13 receptacles)	
4	ERM connector	
5	Large output NEMA L6-30R receptacle (R5500 XR NA/JPN) associated with load segment 1	
6	Large output IEC-309-32A receptacle (R5500 XR INTL) associated with load segment 1	

Item	Description
7	Nondetachable input power cord with NEMA L6-30 plug (R5500 XR NA/JPN)
8	Nondetachable input power cord with IEC-309-32A plug (R5500 XR INTL)

**UPS Power**—To provide power to the UPS, plug the input power cord into a compatible, grounded utility power outlet.

The UPS requires a dedicated (unshared) 30-A branch circuit (NA/JPN models) or a dedicated (unshared) 32-A branch circuit (INTL models).

**Load Equipment Power**—To provide power to the load equipment, connect the IEC-to-IEC jumper cords between the inlet power couplers on the load equipment and any of the receptacles on the UPS rear. The jumper cords must have compatible plugs to allow connection to the UPS receptacles.

The receptacles are arranged in load segments, which can be controlled separately by power management software.

The following 10-A IEC-to-IEC jumper cords are provided for load equipment power:

• Two 1.37-m (4.5-ft) jumper cords (Cable Assembly Number 142263-006)

**Power Distribution**—To provide additional load equipment receptacles:

- Plug an extension bar into any IEC-320-C19 receptacle to yield eight IEC-320-C13 receptacles. Four extension bars are included with the UPS. For more information about extension bars, refer to mPDU Extension Bars (on page 64).
- Plug a compatible PDU or other device into the large output receptacle.

**Power Management**—To manage the UPS with power management software, connect the interface cable between the UPS communications port and the host computer serial port.

For power management, a 3.6-m (12-ft) UPS/computer interface cable is included (cable assembly number 201092-002). The interface cable is not needed for normal operation, but is essential for advanced power management.

**Extended Runtime**—To extend the UPS runtime, connect an ERM to the ERM connector. For more information about HP ERMs, refer to Hardware Options (on page <u>49</u>).

CAUTION: To ensure maximum runtime, be sure to configure the UPS for the number of installed ERMs using the UPS front panel controls.

## **R12000 XR WW**



Item	Description
1	Communications port/option slot
2	Serial ports
3	Option slot (option card shown installed)

**UPS Power**—The UPS R12000 XR must be directly connected (hardwired) to the AC branch circuit (AC mains) by a qualified electrician.

**IMPORTANT:** The UPS R12000 XR requires a circuit provided with a 100-A maximum branch circuit rated overcurrent protection.

**Load Equipment Power**—To provide power to the load equipment, a qualified electrician can directly connect (hardwire) an mPDU to the UPS. Connect the IEC-to-IEC jumper cords between the inlet power couplers on the load equipment and the receptacles on the mPDU extension bars. The jumper cords must have compatible plugs to allow connection to the receptacles.

One 40-A worldwide mPDU ("HV mPDU" on page <u>61</u>) (part number 252663-B21) is included with the UPS. The mPDU includes two 1.37-m (4.5-ft) 10-A jumper cords (cable assembly number 142263-006).

**NOTE:** For information on adding flexibility to the UPS R12000 XR, refer to R12000 XR Backplate Receptacle (on page <u>59</u>).

**Power Management**—To manage the UPS with power management software, connect the interface cable between the UPS communications port and the host computer serial port.

For power management, a 3.6-m (12-ft) UPS/computer interface cable is included (cable assembly number 201092-002). The interface cable is not needed for normal operation, but is essential for advanced power management.

**Extended Runtime**—To extend the UPS runtime, a qualified electrician can directly connect (hardwire) an ERM to the UPS. For more information about HP ERMs, refer to Hardware Options (on page 49).

CAUTION: To ensure maximum runtime, be sure to configure the UPS for the number of installed ERMs using the UPS front panel controls.

# **Hardware options**

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# **Hardware options summary**

Option model	Voltage (VAC)	Option kit part number
Six Port Card (on page 51)	N/A	192185-B21
SNMP / Serial Port Card ("SNMP/Serial Port Card" on page <u>52</u> )	N/A	192189-B21
T1000 XR ERM (on page <u>53</u> )	N/A	218967-B21
T1500 XR / T2200 XR ERM ("T1500 XR and T2200 XR ERM" on page <u>54</u> )	N/A	218969-B21
R1500 XR ERM (on page <u>55</u> )	N/A	218971-B21
R3000 XR ERM (on page <u>56</u> )	N/A	192188-B21
R5500 XR ERM (on page <u>57</u> )	N/A	326564-B21
R12000 XR ERM (on page <u>58</u> )	N/A	217800-B21

Option model	Voltage (VAC)	Option kit part number
R12000 XR Backplate Receptacle US (on page 59)	N/A	325361-001
R12000 XR Backplate Receptacle WW (on page 59)	N/A	325361-B21
Fixed Cord PDU with Extension Bars	100-120 or	351655-B21
("Fixed Cord PDU" on page <u>60</u> )	200-240	
Fixed Cord PDU with Control Unit and	100-120 or	351655-B22
Extension Bars ("Fixed Cord PDU" on page 60)	200-240	
LV, mPDU, 24 A, NA/JPN ("LV mPDU" on page <u>61</u> )	100-127	252663-D71
HV, mPDU, 16 A, WW ("HV mPDU" on page 61)	200-240	252663-B24
HV, mPDU, 24 A, NA/JPN ("HV mPDU" on page 61)	200-240	252663-D72
HV, mPDU, 32 A, INTL ("HV mPDU" on page 61)	200-240	252663-B31
HV, mPDU, 40 A, WW ("HV mPDU" on page 61)	200-240	252663-B21
LV mPDU Extension Bars ("mPDU extension bars" on page 64)	100-127	N/A
HV mPDU Extension Bars ("mPDU extension bars" on page <u>64</u> )	100-240	N/A

## **Six Port Card**



A standard UPS can communicate directly with a single host computer. The Six Port Card expands the communications capability of the UPS so that a single UPS can exchange data with up to three host computers when power management software is installed.

The Six Port Card can be used to increase protection. Add up to three servers to the host UPS to increase the number of protected devices that serially communicate.

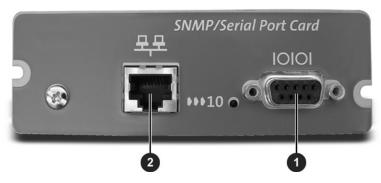
To download the necessary software, refer to the HP website (<a href="http://www.hp.com/products/ups">http://www.hp.com/products/ups</a>).

**IMPORTANT:** The Six Port Card cannot be used to increase protection and scale the UPS at the same time.

The Six Port Card Option Kit contains four 3.6-m (12-ft) serial interface cables (cable assembly number 201092-002)

Install the Six Port Card in the communications port/option slot in the UPS XR model.

## **SNMP/Serial Port Card**



Item	Description
1	Serial port
2	Communications port

The HP SNMP/Serial Port Card connects the UPS to a server running the SNMP configuration program. In a network environment, the SNMP/Serial Port Card provides an interface that allows communication between the UPS and the network when power management software is installed. The card is shipped with a configuration cable and default power management settings that can be customized.

Install the SNMP/Serial Port Card in the communications port/option slot in the UPS XR model.

To configure the card IP address, connect the configuration cable (cable assembly number 201092-002) between the serial port on the installed card and the computer serial port.

The card, when configured, connects the UPS to a twisted-pair Ethernet (10Base-T) network using an RJ-45 connector for communication over a network.

## **T1000 XR ERM**



The ERM includes a nondetachable ERM cable. UPS XR models include a rear panel connector to which the ERM cable of a compatible ERM can attach.

**NOTE:** To install a second ERM, plug the cable from the second ERM into the socket at the rear of the first ERM. Up to two ERM units can be connected.

With two ERMs, the UPS available runtime is approximately 30 minutes or greater.

**NOTE:** To properly configure UPS XR models, except the R5500 XR and R12000 XR, when attaching an ERM, download and run the configuration file SP16385.EXE located at the HP web (http://www.hp.com/products/ups)site.

## **T1500 XR and T2200 XR ERM**

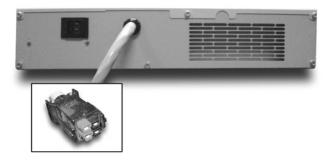


The ERM includes a nondetachable ERM cable. UPS XR models include a rear panel connector to which the ERM cable of a compatible ERM can attach.

**NOTE:** To install a second ERM, plug the cable from the second ERM into the socket at the rear of the first ERM. Up to two ERM units can be connected.

With two ERMs, the UPS available runtime is approximately 30 minutes or greater.

## **R1500 XR ERM**



The ERM includes a nondetachable ERM cable. UPS XR models include a rear panel connector to which the ERM cable of a compatible ERM can attach.

**NOTE:** To install a second ERM, plug the cable from the second ERM into the socket at the rear of the first ERM. Up to two ERM units can be connected.

With two ERMs, the UPS available runtime is approximately 30 minutes or greater.

## **R3000 XR ERM**



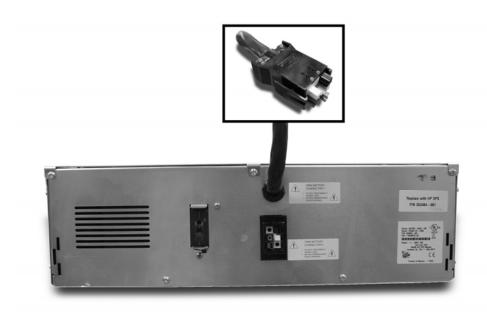
The ERM includes a detachable ERM cable. UPS XR models include a rear panel connector to which the ERM cable of a compatible ERM can attach.

**NOTE:** To install a second ERM, plug the cable from the second ERM into the socket at the rear of the first ERM. Up to two ERM units can be connected.

At the HP recommended 80 percent load, one ERM extends the available UPS runtime up to 30 minutes.

After connecting the ERM, turn the battery circuit breaker to the On (closed) position.

## **R5500 XR ERM**



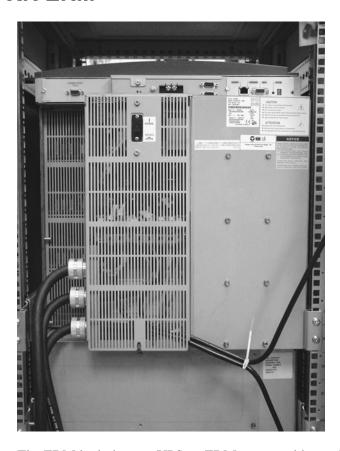
The ERM includes a nondetachable ERM cable. UPS XR models include a rear panel connector to which the ERM cable of a compatible ERM can attach.

**NOTE:** To install a second ERM, plug the cable from the second ERM into the socket at the rear of the first ERM. Up to two ERM units can be connected.

At the HP recommended 80 percent load, one ERM extends the available UPS runtime up to 30 minutes.

The ERM is configured on the UPS user interface.

## **R12000 XR ERM**



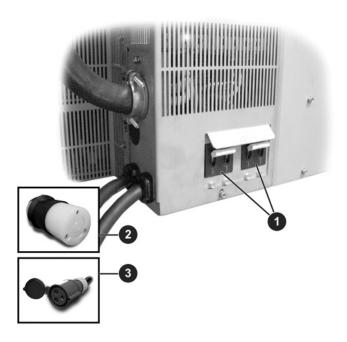
The ERM includes one UPS-to-ERM power cable set (part number 283048-001) and one ERM-to-ERM power cable set (part number 283049-001).

The ERM must be directly connected (hardwired) to the UPS R12000 XR by a qualified electrician.

At the HP recommended 80 percent load, one ERM extends the available UPS runtime up to 30 minutes.

The ERM is configured on the UPS user interface.

# R12000 XR backplate receptacle



Item	Description
1	Circuit breakers
2	Large output NEMA L6-30R receptacle—adding X2 (US version)
3	IEC-309-32A receptacle—adding X2 (International version)

The backplate receptacle includes two nondetachable cords with L6-30 receptacles (US version) or IEC-309 receptacles (WW version).

The backplate receptacle must be directly connected (hardwired) to the UPS R12000 XR by a qualified electrician.

When installed, the backplate receptacle allows for easy connection to up to two devices or PDUs.

## **Fixed Cord PDU**



The Fixed Cord PDU consists of a control unit and may include extension bars. Each extension bar has a 33-cm (13-in) nondetachable power cord with an IEC-320-C20 plug.

Be sure the devices connected to the PDU do not exceed unit capabilities:

- Model 351655-B21 ships with two extension bars. Each extension bar has seven 33-cm (13-in) attached cords with IEC-320-C13 receptacles. This model has a maximum rating of 24 A.
- Model 351655-B22 ships with a control unit with a 2-m (6.5-ft) nondetachable power cord with an L6-30 plug and four IEC-320-C19 receptacles. This model includes four extension bars. Each extension bar has seven 33-cm (13-in) attached cords with IEC-320-C13 receptacles. This model has a maximum rating of 24 A.

## LV mPDU





The HP low-voltage NA/JPN mPDU includes a 2-m (6.5-ft) nondetachable power cord with an L5-30 plug and four 100–127 V extension bars with eight NEMA 5-15 receptacles each. Each extension bar has a 2-m (6.5-ft) nondetachable power cord with an IEC-320-C20 plug.

Be sure the devices connected to the mPDU do not exceed unit capabilities. This model has a maximum rating of 24 A.

## **HV mPDU**

The HP high-voltage mPDU ships with extension bars. Each extension bar includes a nondetachable 2-m (6.5-ft) power cord with an IEC-320-C20 plug and ships with two 1.37-m (4.5-ft) 10-A jumper cords (cable assembly number 142263-006).

Be sure the devices connected to the PDU do not exceed unit capabilities:

• Model 252663-B24 (world wide) includes a country-specific, detachable power cord and ships with two 100–240 V extension bars with eight IEC-320-C13 receptacles each. This model has a maximum rating of 16 A.



 Model 252663-D72 (NA/JPN) includes a 2-m (6.5-ft) nondetachable power cord with an L6-30 plug and ships with four 100–240 V extension bars with eight IEC-320-C13 receptacles each. This model has a maximum rating of 24 A.



 Model 252663-B31 (international) includes a 2-m (6.5-ft) nondetachable power cord with an IEC-309-32A plug and ships with four 100-240 V extension bars with eight IEC-320-C13 receptacles each. This model has a maximum rating of 32 A.





 Model 252663-B21 (world wide) is hardwireable only and ships with three 100–240 V extension bars with eight IEC-320-C13 receptacles each and one 100–240 V extension bar with four IEC-320-C19 receptacles. This model has a maximum rating of 40 A



## mPDU extension bars

All extension bars included with the mPDU kits have a nondetachable 2-m (6.5-ft) power cord with IEC-320-C20 plugs.

The low-voltage mPDU kits ship with four 100–127 V extension bars with eight NEMA 5-15 receptacles each. Refer to LV mPDU (on page 61).



The high-voltage mPDU kits ship with two to four (depending on the model) 100–127 V extension bars with eight IEC-320-C13 receptacles each. Model 252663-B21 (world wide) ships with one 100–240 V extension bar with four IEC-320-C19 receptacles. Refer to HV mPDU (on page 61).



# **Cable information**

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# **Ordering cables**

To order cables:

- 1. Locate the appropriate UPS in this guide and note its cable assembly numbers.
- 2. Look up the cable assembly numbers in the tables in this section.
- 3. Order replacement cables using the option kit part number.
- 4. Use the spares kit part number for warranty replacement.

# **IEC-to-IEC** jumper cords

Cable assembly	Option kit part number	Spares kit part number	Description	Plug	Receptacle
number	For additional cables	For warranty replacement			
142263-001	N/A	142258-001 Quantity 1	2.0-m (6.6-ft) 10 A IEC-to-IEC	C14	C13

Cable assembly	Option kit part number	Spares kit part number	Description	Plug	Receptacle
number	For additional cables	For warranty replacement			
142263-002	142257-002 Quantity 1	142258-002 Quantity 1	2.5-m (8-ft) 10 A IEC-to-IEC	C14	C13
142263-003	142257-003 Quantity 1	142258-003 Quantity 1	3.0-m (10-ft) 10 A IEC-to-IEC	C14	C13
142263-004	N/A	142258-004 Quantity 1	3.6-m (12-ft) 10 A IEC-to-IEC, right angled	C14	C13
142263-005	N/A	142258-005 Quantity 1	3.6-m (12-ft) 10 A IEC-to-IEC, straight	C14	C13
142263-006	142257-006 Quantity 1 142257-007 Quantity 15	142258-006 Quantity 1	1.37-m (4.5-ft) 10 A IEC-to-IEC	C14	C13
142263-007	313186-B21 Quantity 1	N/A	3.6-m (12-ft) 10 A IEC-to-IEC, right angled	C14	C13
142263-008	142257-B28 Quantity 1	142258-B28	0.5-m (1.64 ft) 10 A IEC-to-IEC	C14	C13

Cable assembly	Option kit part number	Spares kit part number	Description	Plug	Receptacle
number	For additional cables	For warranty replacement			
201492-001	201493-001 Quantity 1	221763-001	1.8-m (6-ft), IEC18 (10 A)	C18	C7
	201493-002 Quantity 20		to dual IEC7 (2.5 A)		6
201492-002	201493-B21 Quantity 1	310724-002	3.6-m (12-ft), IEC18 (10 A)	C18	C7
	201493-B22 Quantity 20	to dual IEC7 (2.5 A)		6	
242867-001	N/A	295508-001 Quantity 1	3.0-m (10-ft) 16 A IEC-to-IEC	C20	C19
242867-002	295633-B22 Quantity 1	319304-001 Quantity 1	2.5-m (8-ft) 16 A IEC-to-IEC	C20	C19

# Input power cords

Cable assembly	Option kit part number	Spares kit part number	Description	Plug	Receptacle
number	For additional cables	For warranty replacement			
162536-001	340732-001 Quantity 1	340741-001 Quantity 1	1.8-m (6-ft) 10 A	NEMA 6-15	C13

Cable assembly number	Option kit part number For additional	Spares kit part number For warranty	Description	Plug	Receptacle
	cables	replacement			
295477-001	305340-021 Quantity 1/ Lot 25	295547-002 Quantity 1	3.6-m (12-ft) 16 A EURO	CEE 7/7 SCHUKO	C19
295478-001	305340-031 Quantity 1/ Lot 25	295547-031 Quantity 1	3.6-m (12-ft) 13 A UK	BS-1363	C19
295479-001	305340-081 Quantity 1/ Lot 25	295547-003 Quantity 1	3.6-m (12-ft) 16 A	IEC-309	C19
295509-001	340653-001 Quantity 1	295547-001 Quantity 1	3.6-m (12-ft) 20 A	L6-20P	C19
295510-001	305340-AR1 Quantity 1/ Lot 25	295547-AR1 Quantity 1	3.6-m (12-ft) 16 A C6 South Africa	BS-546	C19
295511-001	305340-011 Quantity 1/ Lot 25	295547-011 Quantity 1	3.6-m (12-ft) 16 A Australia/ New Zealand	AS-3112	C19

Cable assembly	Option kit part number	Spares kit part number	Description	Plug	Receptacle
number	For additional cables	For warranty replacement			
295553-001	305340-061 Quantity 1/ Lot 25	280822-061 Quantity 1	3.6-m (12-ft) 16 A Italy	IT16S3	C19

# **Serial interface cables**

Cable assembly	Option kit part number	Spares kit part number	Description	Plug	Receptacle
number	For additional cables	For warranty replacement			
201092-001	N/A	N/A	9-pin communication cable M D-Sub—F D-Sub	Pins	Holes
201092-002	212161-B21 Quantity 1	204508-001 Quantity 1	9-pin communication cable M D-Sub—F D-Sub	Pins	Holes
201093-001	N/A	204509-001 Quantity 1	3.6-m (12-ft), 9-pin UPS-to-UPS interface cable	Pins	Pins

# **Acronyms and abbreviations**

### **ERM**

extended runtime module

### **IEC**

International Electrotechnical Commission

### **mPDU**

modular power distribution unit

### **NEMA**

National Electrical Manufacturers Association

### **PDU**

power distribution unit

### **UPS**

uninterruptible power system

#### **USB**

universal serial bus

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